BOYARKIN, A.N.

Rapid method for determining the activity of phenoloxidase. Trudy Inst.fiziol.rast. 8 no.2:398-403 '54. (MLRA 8:5)

1. Institut fiziologii rasteniy im. K.A.Timiryazeva Akademii nauk SSSR.

(Phenolases)

BOYARKIN, A.N.

Simple chromatographic and spot method for determining sugars on filter paper.. Fiziol.rast. 2 no.3:298-302 My-Je '55.
(MLRA 8:11)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk SSSR, Moscow
(Sugars) (Chromatographic analysis)

BOYARKIN, A.N.

Letter to the editor of "Fiziologiia rastenii." Fiziol.rast. 2 no.6:590 N-D '55. (MLRA 9:5)

(Phenolases)

Boyarkin A.N.

Effect of the length of day on activity of oxidizing enzymes in plants. M. Kh. Chailakhyan and A. N. Boyarkin (K. A. Timiryazev Plant Physiol. Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 105, 592–5(1955).—Expts. with several varieties of tobacco, kidney bean, oats, cabbage, tomatoes, soybean, chrysanthemum, perilla, and millet showed that the activity of peroxidase and polyphenoloxidase varies during the day in the same direction in all parts of the plant. In a short day (short illumination period) the activity of peroxidase is higher than is the case in a long day; no such regularity is found in polyphenoloxidase activity. G. M. Kosolapoff

MD (1)

Boyarkin, A.N.

Multicolor development of amino acids in paper chromatograms. A. N. Boyarkin (K. A. Timiryazev Inst. Plant Physiol., Moscow). [illegible]

[illegible] 364 [illegible] velopment of chromatograms of amino acids [illegible] modified isatin method is described [illegible]

COUNTRY	:	USSR
CATEGORY	:	Plant Physiology. Respiration and Metabolism. I
ABS. JOUR.	:	RZhBiol., No. 3 1959, No. 10590
AUTHOR	:	Boyarkin, A. N.
INST.	:	Academy of Sciences, USSR
TITLE	:	Drop Method of the Determination of the Total Content of Free Amino Acids and Sugars in Plants.
ORIG. PUB.	:	V sb.: Pamyati akad. N. A. Maksimova, M., AN SSR, 1957, 318-323
ABSTRACT	:	The suggested method is based on the comparison of the intensity of the coloration of the stains obtained on filter paper from the liquid being studied, and from the standard solutions of amino acids and sugars in known concentrations after the development of the stains by appropriate reagents. A modified homogenizer for securing extracts from a small amount (5-200 milligrams) of the plant material is described. -- T. F. Koretskaya

CARD: 1/1

Boyarkin, A.N.

BOYARKIN, A.N.

More on developing amino acid paper chromatograms with isatin.
Fiziol. rast. 5 no.1:86-87 Ja-F '58. (MIRA 11:1)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR, Moskva.
(Chromatographic analysis) (Amino acids) (Isatin)

[illegible]	: USSR
[illegible]	: Plant Physiology. Respiration and Metabolism.
ABS. JOUR.	: RZhBiol., No. 5, 1959, No. 19951
AUTHOR	: Boyarkin, A. N.; Dmitriyeva, M. I.
INST.	: Not given
TITLE	: The Separation of Amino Acids on Small Sized Paper Chromatograms.
ORIG. PUB.	: Fiziol. rasteniy, 1958, 5, No. 4, 386-390
ABSTRACT	: No abstract

CARD: 1/1

BOYARKIN, A.N.; DMITRIYEVA, M.I.

Biological test for gibberellins. Fiziol.rast. 6 no.6:741-747 N-D '59. (MIRA 13:4)

1. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of Sciences, Moscow.
(Gibberellins) (Biological assay)

BOYARKIN, G., kinomekhanik (Chelno-Vershinskiy rayon, Kuybyshevskaya obl.)
BOYARKINA, A., motorist (Chelno-Vershinskiy rayon, Kuybyshevskaya obl.)

Friendly family. Kinomekhanik no.7:6-7 Jl '53. (MLRA 6:8)
(Moving-picture projection)

BOYARKIN, P.

Meeting of passengers with taxi and bus drivers. Avt. transp. 33 no.4:39 Ap '55. (MLRA 8:7)
(Taxicabs) (Motor bus drivers)

BOYARKIN, V.M.; IVANOV, A.D.

Meteorological observations in the Balagansk cave. Nauch.dokl. vys.shkoly; geol.-geog.nauki no.2:158-162 '58. (MIRA 12:2)

1. Irkutskiy universitet, geograficheskiy fakul'tet, kafedra fizicheskoy geografii.
(Balagansk region--Caves)
(Meteorology--Observations)

BOYARKIN, V.M.; IVANOV, A.D.

Sands of the Angara Velley. Trudy. Irk. un. 24:21-36 '58.
(MIRA 14:7)
(Angara Velly--Sand)

BOYARKIN, V.M.

The Angara flood plain. Trudy Irk. un. 24:3-19 '58. (MIRA 14:7)
(Angara River—Alluvial plain)

BOYARKIN, V.M.

The Talovskoye peat bog and evaluating peat buoyancy. Sib. geog. sbor. no.2:100-109 '63. (MIRA 16:11)

PALAMARCHUK, Maksim Martynovich; PERSHIN, P.N., akademik, otv. red.; BOYARKIN, V.N., red.

[Sugar beet production in the Ukrainian S.S.R.] Svekla-sakharnoe proizvodstvo Ukrainskoy SSR. Kiev, Naukova dumka, 1964. 214 p. (MIRA 18:3)

1. Akademiya nauk Ukr.SSR (for Pershin).

L 20794-65 EWG(j)/EWG(r)/EWT(l)/FS(v)-3/EWG(v)/EWG(a)/EWG(c) Pe-5/Pb-4/
Pa-4 AFWL/ASD(a)-5/AEDC(a)/ASD(f)-3/AMD/AFTC(a)/ESD(t) DD
ACCESSION NR: AR4046196 S/0299/64/000/016/A013/A013

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 16A109

AUTHOR: Kovalenko, A. F.; Kaplan, Ye. Ya.; Boyarkin, V. P.; Klochkov, A. M.

TITLE: Pathogenesis of hemodynamic disorders during supersonic airflow action

CITED SOURCE: Sb. Aviats. i kosmich. meditsina. M., 1963, 252-254

TOPIC TAGS: dog, supersonic airflow, biological effect, blood, hemodynamics, blood pressure, cardiovascular system, nervous system, noise

TRANSLATION: The effect of supersonic airflow (1600 km/hr) on the cardiovascular and nervous systems of dogs was determined in acute and chronic experiments. Shifts in cardiac muscle excitability and conductivity took place during airflow action. An increase in arterial pressure (by 10-15%) and blood circulation rate (by 15-20%) during increase in airflow speed took place due to the noise factor

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L 20794-65
ACCESSION NR: AR4046196

(120 db). During direct airflow action, arterial pressure decreases (by 30-35%) and blood circulation rate is retarded (by 20-30%). After 30-60 min the hemodynamic disorders are similar to those of traumatic shock. Pressor reaction to carotid artery constriction was reduced by 20-30%. Excitability of the vasomotor and respiratory center increased under the influence of airflow noise and decreased during airflow impact action. The functional state of the sympathetic nerves changed in a similar manner. No significant changes were observed on the part of the parasympathetic innervation state during airflow noise and impact action. Airflow noise caused intensification of brain bioelectric activity. Bioelectric activity change in the cortex during impact airflow action attests to development of inhibiting processes. Activity of subcortical formations increased in some animals and decreased in others. Airflow effect on the organism was insignificant in cases when special protection was used.

SUB CODE: LS ENCL: 00

Cor: 2/2

S/120/62/000/006/005/029
E032/E114

AUTHORS: Bednyakov, A.A., Boyarkina, A.N, Savenko, I.A., and Tulinov, A.F.

TITLE: A study of the multiple scattering of protons by the photographic method

PERIODICAL: Pribory i tekhnika eksperimenta, no.6, 1962, 35-40

TEXT: A highly collimated proton beam from a 300 kV electrostatic generator at the NIIYaF MGU was passed through an analysing magnet in which it was deflected through 90° and then entered a polystyrene film of a few tens of micrograms per cm^2. The film was set up at right angles to the beam and the protons transmitted by it were recorded by nuclear emulsions of type MK (7 μ thick). The image recorded in the photographic plate was then examined photometrically, and the results of this examination were used to deduce the required angular distribution of the scattered protons. The possibilities of the method are indicated by Fig.7 in which the angular distribution of 162.5 keV protons is shown for films of 24, 40 and 69 $\mu g/cm^2$. The continuous curves were computed from Moliere's multiple scattering theory

Card 1/3

A study of the multiple scattering... S/120/62/000/006/005/029
E032/E114

(G. Moliere, Z. Naturforsch. a, 3a, 1948, 78), using a carbon atom potential computed by the Hartree-Fok method. A more detailed account of the results is reported elsewhere by the present authors (Zh. eksperim. i teor. fiz., v.42, no.3, 1962, 740). There are 7 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki MGU (Scientific Research Institute of Nuclear Physics, MGU)

SUBMITTED: January 26, 1962)

Card 2/3

A study of the multiple scattering... S/120/62/000/006/005/029
E032/E114

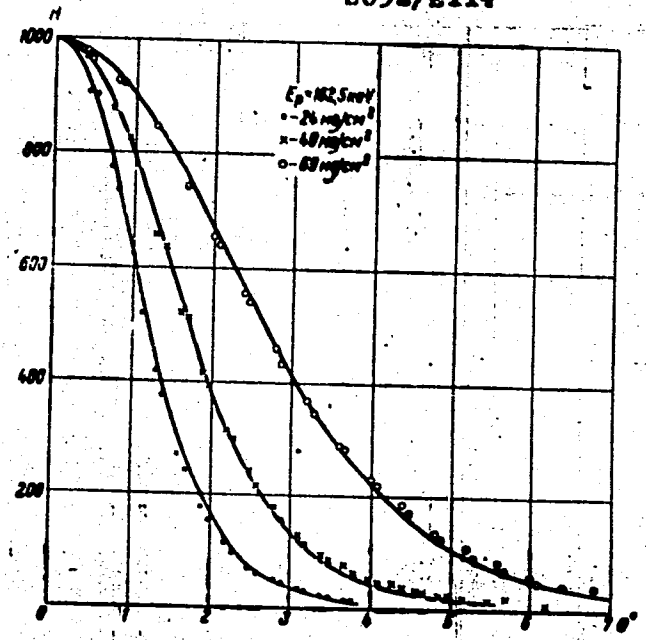

Fig.7

Card 3/3

S/056/62/043/001/018/056
B102/B108

AUTHORS: Balashov, V. V., Boyarkina, A. N.

TITLE: Quasielastic scattering of fast protons and the spectrum of hole excitations in the N^{14} nucleus

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 1(7), 1962, 117 - 120

TEXT: The authors calculated the hole excitation spectrum for the fast-proton induced reaction $N^{14}(p, 2p)C^{13}$. The investigation was made to find out if the levels $1/2^-$, $3/2^-$ and $5/2^-$ do exist and why they have not been discovered up to now. The calculations were carried out on the basis of the model of intermediate coupling, taking account of the correlation between the nucleons and using Kurath's data for central and spin-orbital forces (Phys. Rev. 101, 216, 1956). The C^{13} level excitation probabilities are shown in the level scheme (Fig. 1). The excitation curve is constructed. Agreement with experimental data (Nucl. Phys. 7, 10, 1958) is very good. The levels investigated have not yet been observed in (nC^{12}) scattering experiments because their reduced width is very small and their

Card 1/3

de-excitations are forbidden. These levels have to be investigated in $N^{14} \rightarrow C^{13}$ transitions induced by pickup reactions, as e. g. (T, α) or (He^3, α). It is pointed out that in many light nuclei such abnormally stable superthreshold states might exist; their stability is due to the special forbiddenness of their deexcitations. There are 2 figures and 5 tables.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: December 23, 1961

Quasielastic scattering ...

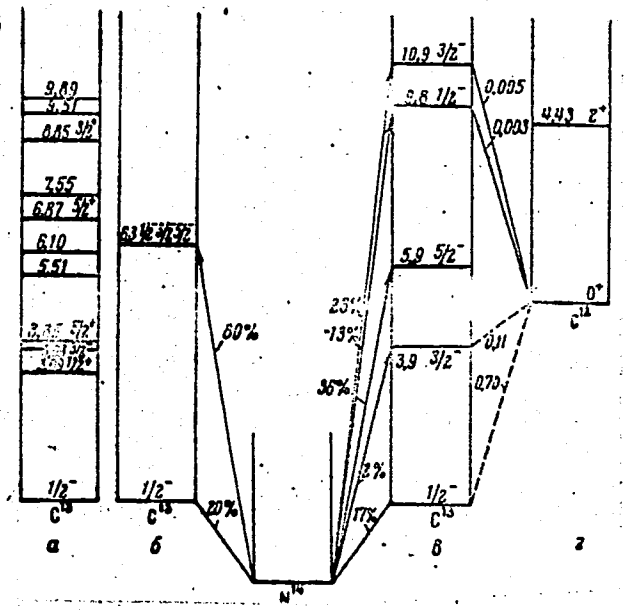

Fig. 1. Level scheme of the C^{13} nucleus and the $N^{14} \rightarrow C^{13}$ and $C^{13} \rightarrow C^{12}$ transitions. (a) Experimental results (Nucl. Phys. 11, 1, 1959); (б) calculated with jj-coupling model, (в) - intermediate coupling. The v values in % give the relative transition probabilities ($N^{14} \rightarrow C^{13}$); (г) $C^{13} \rightarrow C^{12}$ transition scheme; the reduced widths are given in Wigner units.

Card 3/3

BEDNYAKOV, A.A.; BOYARKINA, A.N.; SAVENKO, I.A.; TULINOV, A.F.

Multiple scattering of 100 - 200 Kev. protons on carbon. Zhur.eksp. i teor.fiz. 42 no.3:740-746 Mr '62. (MIRA 15:4)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

(Protons--Scattering) (Carbon)

BALASHOV, V.V.; BOYARKINA, A.N.

Spectroscopic approach to the description of the interaction between fast nucleons and light nuclei. Izv. AN SSSR. Ser. fiz. 26 no.9:1196-1198 S '62. (MIRA 15:9)
(Nuclear reactions) (Nuclear models)

L 17868-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3003695 S/0048/63/027/007/0907/0913

55
53

AUTHOR: Boyarkina, A.N.; Rotter, I.

TITLE: Anomolously stable above-threshold states of C^{13} and N^{13} /Report of the Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev from 25 January to 2 February 1963/

SOURCE: AN SSSR, Izv.Seriya fizicheskaya, v.27, no.7, 1963, 907-913

TOPIC TAGS: nuclear reaction, anomolous level, pickup, C^{13}, N^{13}

ABSTRACT: As was shown earlier (V.V.Balashov and A.N.Boyarkina, Zhur,eksp.i teor. fiz.,43, 117, 1962), under proton bombardment involving ejection of a nucleon there form "hole" type states, which, being genealogically related with the ground state of the initial nucleus, have an anomalously small single-particle width. In discussing the $N^{14}(p,2p)C^{13}$ reaction particular attention was given to the $5/2^-$ level, which corresponds to the most intense N^{14}--C^{13} transition; this level, according to calculations should lie at about 6 MeV. Experimental searches for this level, however, have been fruitless. Accordingly, it was deemed desirable to analyze the potentialities and limitations of the experimental methods used to detect this and

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L 17868-63
ACCESSION NR: AP3003695

2

other similar anomalously stable high-lying levels. The calculations were carried out in the framework of the intermediate coupling model, and involved evaluation of the correlation functions and transition probabilities, taking into account configuration mixing. The analysis indicates that the negative experimental results as regards detection of the 5/2- level in C^{13} and N^{13} are not fortuitous: the theory is correct, but the experimental techniques employed to date are inadequate in view of the anomalous character of the level. It is suggested that confirmation of the existence of levels of this type may be obtained by studying the pick-up reaction at high incident particle energies and inelastic scattering of fast alpha-particles. "The author is grateful to V.V.Balashov for his constant interest in the work." Orig.art.has: 1 formula, 4 figures and 6 tables.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute for Nuclear Research)

SUBMITTED: 00 DATE ACQ: 02Aug63 ENCL: 00

SUB CODE: NS NO REF SOV: 001 OTHER: 016

Card 2/2

ACCESSION NR: AP4024060

S/0048/64/028/002/0337/0358

AUTHOR: Boyarkina, A.N.

TITLE: Wave functions of the ground and excited states of 1p shell nuclei in the intermediate coupling model /Report, Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev 25 Jan to 2 Feb 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 337-358

TOPIC TAGS: wave function, ground state wave function, excited state wave function, intermediate coupling, LS coupling, 1p shell nucleus, light nucleus, level diagram

ABSTRACT: In 1956 D.Kurath (Phys.Rev.101,216,1956) carried out detailed calculations of the states (energy levels) of 1p shell nuclei in the intermediate coupling approximation. Subsequently, Kurath (Ibid.106,975,1957) used the wave functions obtained in the earlier work for calculating the probabilities for electromagnetic transitions in 1p shell nuclei. Unfortunately, the wave functions involved were never published, so that this essential information for calculating other nuclear characteristics is not available. In connection with development of the theory of quasielastic scattering of fast protons by light nuclei in the framework of the so-

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ACCESSION NR: AP4024060

called "spectroscopic" approach, the writer, by way of the intermediate computations necessary for description of the (p,2p), (p,np), (p,pd) and other reactions undertook detailed calculations of the wave functions of the ground and excited states of all 1p shell nuclei in the intermediate coupling approximation. The present paper gives the results of these calculations, taking into account the various remarks and suggestions made by different theoretical and experimental investigators; the purpose of the publication is to make available to experimentors working in the region of light nuclei the necessary data for independent interpretation of the data. The wave functions of nuclei with A from 6 to 14 are given in the LS coupling representation; 76 tables list the corresponding components obtained as a result of diagonalization of the energy matrices with the aid of the "Strela" computer at Moscow State University. The final table lists the optimum parameters of the intermediate coupling model. Ten figures give the calculated level diagrams of the low-lying levels of the 1p shell nuclei (Li^6 through N^{14}) calculated on the basis of the adduced data and the corresponding experimental spectra. "In conclusion I express my sincere gratitude to V.V.Bashalov for his constant interest in the work and also to the staff in the computing section of the OIYaI (Joint Institute for Nuclear Research) for assistance in carrying out the calculations." Orig.art.has: 10 figures and 77 tables.

Card 2/3

ACCESSION NR: AP4024060

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki, Moskovskogo gosudarstvennogo universiteta im.M.V.Lomonosova (Scientific Research Institute of Nuclear Physics, Moscow State University)

SUBMITTED: 00 DATE ACQ: 08Apr64 ENCL: 00

SUB CODE: NS NR REF SOV: 003 OTHER: 005

3/3
Card

BALASHOV, V.V.; BOYARKINA, A.N.; TULINOV, A.F.

Effect of the excited states of an intermediate nucleus on the reactions of cluster substitution. Izv. AN SSSR. Ser. fiz. 29 no.7:1160-1165 Jl '65. (MIRA 18:7)

ACCESSION NR: AP4024061 S/0048/64/028/002/0359/0370

AUTHOR: Balashov, V.V.; Boyarkina, A.N.

TITLE: Quasielastic scattering of fast protons by light nuclei with knock-out of deuterons /Report, Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev 25 Jan to 2 Feb 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 359-370

TOPIC TAGS: quasielastic proton scattering, elastic proton scattering, scattering by light nuclei, scattering reaction, light nuclei, p shell nuclei, knock-out reaction, nucleon cluster, deuteron yield, deuteron knock-out

ABSTRACT: In a previous study (Zhur,eksp.i teor.fiz.43,117,1962; Nucl.Phys.38,629, 1962) the authors discussed the possibility of a "spectroscopic" approach (approach based on analysis of partial transitions) to description of the processes of quasi-elastic scattering of fast protons by light nuclei with knock-out of one nucleon. It was shown, using the example of the $N^{14}(p,2p)C^{13}$ reaction, that, using shell model wave functions for the ground and excited states of the nuclei, one can characterize in detail the excitation energy spectrum of the residual nucleus in agree-

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ment with experiment. Recently, K.Dietrich (Phys.Letters 2,139,1962) carried out analogous calculations for a number of other 1p shell nuclei. The present study is an attempt to apply the same "spectroscopic" approach to description of reactions with emission of complex nucleonic clusters. The simplest of these, of course, are deuterons. In view of the fact that the available experimental data on knock-out of fast deuterons in the process of quasielastic scattering are extremely scanty, the purpose of the present calculations is not so much to compare theory with experiment as to arrive at some general conclusions and inferences that may prove useful in planning and checking future experiments. The consideration is restricted to 1p shell nuclei and there are considered only states with a complete 1s shell. The calculations are carried out in the framework of the shell model, taking into account nucleon correlations and the requirement for commutative symmetry of the functions, following from the Pauli principle. Thus the lightest nuclei (A = 5 to 7) are described in the framework of the theory of supermultiplets, heavier nuclei - in the framework of the intermediate coupling approximation. The radial single-particle wave functions are assumed to be oscillator ones. All the characteristics of the reactions are calculated in the momentum approximation in which the principal reaction mechanism is knock-out of a deuteron by the incident proton. (A competing process, involving knock-out with the initial spin is mentioned, but in view of the

ACCESSION NR: AP4024061

lack of any valid information on the characteristics of this process and certain other factors, it is neglected.) Following derivation of the appropriate formulas there are computed the deuteron distribution in momentum parameters for proton reactions on Li^6, Li^7, Be^9, C^{12}, N^{14} and O^{16}, and the resultant values are compared with what experimental data are available. In many cases the agreement is satisfactory. In general, however, the available experimental data, as noted above, are still too scanty for adequate comparison with theory. Some recommendations are made concerning possible modifications of present experimental techniques aimed at obtaining results that will be more revealing from the theoretical standpoint. "The authors are grateful to V.G.Neudachin and Yu.F.Smirnov for discussions." Orig.art. has: 18 formulas, 7 figures and 5 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 08Apr64 ENCL: 00

SUB CODE: NS NR REF SOV: 004 OTHER: 008

Card 3/3

21(7)

AUTHORS: Boyarkina, A. N., Tulinov, A. F. SOV/56-36-2-2/63

TITLE: Determination of the Lifetime of the First Excited State of the Be^{10} Nucleus (Opredeleniye vremeni zhizni pervogo vozbuzhdennogo sostoyaniya yadra Be^{10})

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 2, pp 353-361 (USSR)

ABSTRACT: Measuring of lifetimes $< 10^{-10}$ sec is rendered possible by various indirect methods which, however, all have a very small range of applicability. Though this is not the case with the "Doppler-shift" method, its application nevertheless causes considerable technical difficulties. Tulinov therefore developed another method (Ref 1), for the determination of the lifetimes of the excited states of light nuclei, which, compared to the Doppler-shift method, has the same range of applicability but causes less technical difficulty. The present paper first describes this method and later the results obtained by the lifetimes measurements carried out with it. The method is based on the experimental determination of the recoil nuclei ratio for two different positions of the target. The target itself consists

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of a beryllium layer on aluminum backing; at a small distance from the beryllium layer and in front of it there is a compensation layer. The incident beam (deuterons) impinges, after penetrating the backing (position A), upon the beryllium layer, and the light particles penetrating the compensation layer as well as the recoil nuclei are recorded. Position B is attained if the device is turned by an angle of 180°. From the ratio δ = number of recoil nuclei recorded in position B: number of recoil nuclei recorded in position A, it is possible to determine the lifetime τ. The authors employed this method for the purpose of determining the τ of the first excited level of Be^{10} from the reaction $Be^{9}(d, p)Be^{10}$, which has hitherto not been determined. Measurements were carried out on a 4 Mev deuteron beam of the cyclotron of the NIIYaF MGU (Scientific Research Institute for Nuclear Physics of Moscow State University). Within the range of the target the beam had a diameter of 6 mm with an intensity $\sim 10^{-7}$ A. The emitted protons were recorded by proportionality counters, the recoil nuclei by counters with electronic amplification.

Determination of the Lifetime of the First Excited State of the Be^{10} Nucleus

SOV/56-36-2-2/63

δ was determined as amounting to 0.93 ± 0.08, which results in $\tau < 8.10^{-14}$ sec. The theoretical determination of τ for the first excited state of Be^{10} (3.37 Mev) with the spin J=2 and the isotopic spin T=1, the ground state -J=0, T=1 results in $\tau = 6.58.10^{-16}/\Gamma$ where Γ denotes the breadth of the excited level in ev; (τ in seconds). For the E2-transition it holds that $\Gamma = 8.1.10^{-5} E^5 |\langle JT \| H^{(2)} \| J'T' \rangle|^2$; E = transition energy in Mev, $\langle JT \| H^{(2)} \| J'T' \rangle$ the matrix element of electrical quadrupole transition from state J, T to the state J', T' . Thus, τ is equal to $2.1.10^{-13}$ sec. Also for other nuclei (C^{12}, B^{10}) theoretical τ-values are higher than those obtained experimentally.

Card 3/4

The authors finally thank S. S. Vasil'yev and V. G. Neudachin for discussions and they express their gratitude to the collaborators of the cyclotron team Yu. V. Koshelyayev, A. A. Danilov, and V. P. Khlapov for their assistance. There are 7 figures, 1 table, and 17 references, 9 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of Moscow State University)

SUBMITTED: June 27, 1958

S/056/062/042/003/016/049
B104/B102

AUTHORS: Bednyakov, A. A., Boyarkina, A. N., Savenko, I. A., Tulinov, A. F.

TITLE: Investigation of multiple scattering of 100 - 200 kev protons from carbon

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 3, 1962, 740 - 746

TEXT: The angular distributions of 100 - 200 kev protons multiply scattered from polystyrene films were determined by a photographic method. The measurements were made on the electrostatic accelerator of the NIIYaF MGU. The photographic plates were placed at a distance of about 30 mm from the polystyrene films which were hit by a perpendicular proton beam. The hydrogen contained in polystyrene contributed only little to proton scattering. The targets had the following thicknesses: 24 ± 0.6, 40 ± 0.7, 69 ± 0.9, 88 ± 1.1, and 104 ± 1.2 $\mu g/cm^2$. Calculations were conducted on the basis of Molière's theory. A difference of 20 - 30% was observed between experimental and calculated scattering. This discrepancy is a consequence of the Thomas-Fermi model used in the theory. If the

Card 1/2

Investigation of multiple...

potential of a carbon atom obtained by the Hartree-Fock method is used for the calculation, good agreement is attained for proton energies down to 90 kev. For proton energies below 90 kev, the experimental angular distribution is broader than the calculated one. Betteragreement should be attained by taking account of inelastic processes, especially the charge exchange of the moving ions, and the deformations of the electron shell in solid targets. V. S. Nikolayev and Ya. A. Teplova are thanked for discussing the results. There are 6 figures, 2 tables, and 14 references: 4 Soviet and 10 non-Soviet. The four most recent references to English-language publications read as follows: H. A. Bethe, Phys. Rev., 89, 1256, 1953; W. T. Scott, Phys. Rev., 85, 246, 1952; D. S. Lorentz, E. J. Zimmerman, Phys. Rev., 113, 1212, 1959; S. K. Allison, Rev. Mod. Phys., 30, 1137, 1958.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute of Nuclear Physics of the Moscow State University)

SUBMITTED: October 25, 1961

Card 2/2

ACCESSION NR: AT4035837 S/2534/64/000/024/0112/0128

AUTHOR: Boyarkina, A. P.; Demin, D. V.; Zotkin, I. T.; Fast, V. G.

TITLE: Study of the shock wave of the Tungus meteorite from the associated forest destruction

SOURCE: AN SSSR. Komitet po meteoritam. Meteoritika, no. 24, 1964. Trudy* Desyatoy Meteoritnoy konferentsii v Leningrade 29 maya - 1 iyunya 1962 g., 112-128

TOPIC TAGS: meteorite, Tungus meteorite, shock wave

ABSTRACT: The radial flattening of the forest in the area of the explosion of the Tungus meteorite is the most reliable criterion for study of the propagation of the shock wave accompanying the explosion. The forest flattening has been investigated repeatedly on the ground and from the air and a considerable body of literature has accumulated concerning the phenomena, parts of which are reviewed in this paper. Data from the expeditions of 1960 and 1961 are discussed in the greatest detail; the methods applied to study of the forest flattening are becoming increasingly sophisticated. Emphasis in this article is on statistical analysis of data collected over the 2,000-km^2 area of forest flattening. New topographic

Card 1/2

ACCESSION NR: AT4035837

surveys and aerial photography have facilitated the investigation. Data are available for 580 points throughout the area; in the latest expedition a grid was laid out and azimuths of fallen trees measured carefully in the sample areas. A general description of the area of flattening is followed by a statistical analysis of the forest destruction. Particular attention is given to the central area and a study of the influence of relief on the degree of destruction. Fig. 1 of the Enclosure shows the flattening of the forest in the area of falling of the meteorite. Orig. art. has: 25 formulas, 11 figures and 1 table.

ASSOCIATION: Komitet po meteoritam, Akademiya nauk SSSR (Committee on Meteorites, Academy of Sciences SSSR)

SUBMITTED: 00	DATE ACQ: 28May64	ENCL: 02
SUB CODE: AA	NO REF SOV: 012	OTHER: 000

Card 2/2

USSR/Soil Science - Organic Fertilizers. J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86817

Author : Boyarkina, I.S.

Inst : Central Peat Bog Experimental Station

Title : Effectiveness of Peat Fertilizers in Soils Differing in Mechanical Composition.

Orig Pub : Byul. Nauchno-tekhn. inform. Tsentr. torfo-bolotn. opytn. st., 1957, No 1, 52-54

Abstract : The Central Peat Bog Experimental Station's experiments in sandy and loamy soils showed that the effectiveness of fertilizers prepared from different kinds of peat is identical for both soils. All kinds of lowland peats proved most effective, the upland peats - least. The kind of peat did not have significance in composting with manure. -- O.P. Medvedeva

Card 1/1

BARASHEV, Pavel Romanovich; BOYARKINA, V., redaktorp PETROVA, E., tekhnicheskiy redaktor

[An ordinary voyage; a reporter's notes] Obychnyi reis; zapisiki reportera [Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia," 1956. 126 p.

(Voyages and travels) (MIRA 9:7)

OSIPOV, Iosif Zinov'yevich; BOYARKINA, V., redaktor; TERYUSHIN, M., tekhnicheskiy redaktor

[Sakhalin notes] Sakhalinskie zapisi. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1956. 285 p. (MLRA 9:10)
(Sakhalin--Description and travel)

MURATOV, Mikhail Basil'yevich; BOYARKINA, V., redaktor; YEGOROVA, I., tekhnicheskiy redaktor

[Toward danger; two voyages by Capitains V.Bering and A.Chirikov, their associates and companions] Navstrechu opasnostiam; dva puteshestviia kapitanov V.Beringa, A.Chirikova, ikh spodvizhnikov i sputnikov. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia, 1956. 324 p. (MLRA 9:9)

(Bering's expedition, 1st, 1725-1730)
(Bering's expedition, 2nd, 1733-1743)

BOYARKINA, V.

STANYUKOVICH, Kirill Vladimirovich; BOYARKINA, V., redaktor; TERYUSHIN, M., tekhnicheskiy redaktor.

[Alongmountain paths; a geobotanist's notebook] Po gornym tropam; zapiski geobotanika. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1957. 206 p. (MIRA 10:6)
(Siberia--Description and travel)
(Siberia--Botany)

BOYARKINA, V.

OSIPOV, Iosif Zinov'yevich; BOYARKINA, V., redaktor; MOROZOVA, G., tekhnicheskiy redaktor

[From a tourist's notebook] Iz putevogo bloknota turista. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1957. 83 p. (MLRA 10:9)
(Europe--Description and travel)

BOYARKINA, V.

BARASHEV, Pavel Romanovich; BOYARKINA, V., redaktor; PETROVA, E., tekhnicheskiy redaktor

[Orion's travelling companions; a reporter's notebook] Sputniki Oriona; zapiski reportera. [Moskva] Izd-vo TsK VLKSM "Molodaia gvardiia," 1957. 146 p. (MLRA 10:8)
(Antarctic regions)

SOBOLEV, S.S.; VILENSKIY, D.G., prof., doktor geologo-mineralog. nauk, otv. red.; BOYARKINA, V.A., red.; KUZNETSOV, N.S., red. kart; GLEYKH, D.A., tekhn.red.

[Soil erosion and its control] Eroziia pochv i bor'ba s neiu. Moskva, Gos.izd-vo geogr.lit-ry, 1960. 173 p.
(MIRA 14:5)

(Erosion)

BOYARKINA-TUPING, O. S.

"The Characteristics of the Clinical Treatment and Prophylaxis of Morbidity in Children During Postnatal Septic Illnesses of the Mothers." Cand Med Sci, Second Moscow State Medical Inst imeni I. V. Stalin, 6 Dec 54. (VM, 24 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

1. BOYARKO, Ye. A.; CHERNYY, I. A.

2. USSR (600)

4. Selenium Cells

7. Basic properties of selenium cells, Energ. biul., No. 9, 1952.

9. **Monthly List of Russian Accessions**, Library of Congress, February 1953. Unclassified.

1. BOYARKO, YE. A.: CHERNYY, I. A.

2. USSR (600)

4. Electric Current Rectifiers

7. Scheme for transforming an alternating current into a direct current. Energ. biul. no. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.

1. BOYARKO, YE. A.: CHERNYY, I. A.

2. USSR (600)

4. Electric Current Rectitiers

7. Capital repairs of the rectifiers of oil and selenium units. Energ.baul., no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

AUTHOR: Boyarko, Yu.L.

SOV/132-59-1-11/18

TITLE: The experience of Preventing Zenithal Bending of Deep Structural Bore-Holes in the Zlatoust Geological Prospecting Group (Opyt preduprezhdeniya zenitnogo iskrivleniya glubokikh strukturnykh skvazhin v Zlatoustovskoy geologorazvedochnoy partii)

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 1, pp 46-48 (USSR)

ABSTRACT: The author proposes the following measures to avoid a zenithal bending of deep (over 600 m) bore-holes: 1) the use of a more rigid and longer core drill; 2) the use of centering cylinders; 3) the use of a reduced quantity of shot of smaller diameter; and 4) a change in rotation direction of the core drill (see the table). There are two diagrams and one table.

ASSOCIATION: Zlatoustovskaya geologorazvedochnaya partiya (The Zlatoust Geological Prospecting Group)

Card 1/1

BOYARKO, Yu.L.

Hinged deflector for slanting boreholes. Razved. i okh. nedr 27 no.4:46-47 Ap '61. (MIRA 14:5)

1. Tomskiy politekhnicheskiy institut.
(Core drilling)

BOYARKO, Yu.L.

Using deflecting wedges in directional drilling of core holes. Izv.vys.ucheb.zav.; geol. i razv. 4 no.11:120-128 N '61. (MIRA 15:2)

1. Tomskiy politekhnicheskiy institut imeni S.M.Kirova. (Boring)

BOYARKO, Yu.L.

Anisotropy of the mechanical properties of rocks as a cause of the crookedness of wells. Neft. khoz. 42 no. 3:15-18 Mr '64. (MIRA 17:7)

BOYARKO, Yu.L.

Effect of the anisotropy of rock hardness on the azimuthal crookedness of wells. Neft. khoz. 43 no.2:19-23 F '65.
(MIRA 18:4)

BOYARKO, Yu.L.; ROZHKOV, V.P.

Anisotropy of the mechanical properties of rocks as the cause of azimuthal deflection in core drilling. Izv.vys.ucheb.zav.; geol. i razv. 8 no.10:134-143 O '65.

(MIRA 19:1)

1. Tomskiy politekhnicheskiy institut.

BOYARKOV, F. I.

Conference of the readers of the journal "Plasticheskie massy" at the "Karbolit" (Orekhovo-Zuevo) plant. Plast.massy no.8:71-73 '60. (MIRA 13:10)

(Plastics--Periodicals)

BOYARKOV, F.I.; KUPAVO, A.V.

Innovations in the production of plastics. Bul. [redacted]ekon.inform. Gos.nauch.-issl.inst.nauch.i tekh.inform. no.12:8-11 '63. (MIRA 17:3)

BOYARKOV, F.I.; KUPAVO, A.V.

Intrashop conveying in a chemical enterprise. Biul.tekh.-ekon.inform. Gos.nauch.-issl.inst.nauch.i tekh.inform. no.12:79-82 '63. (MIRA 17:3)

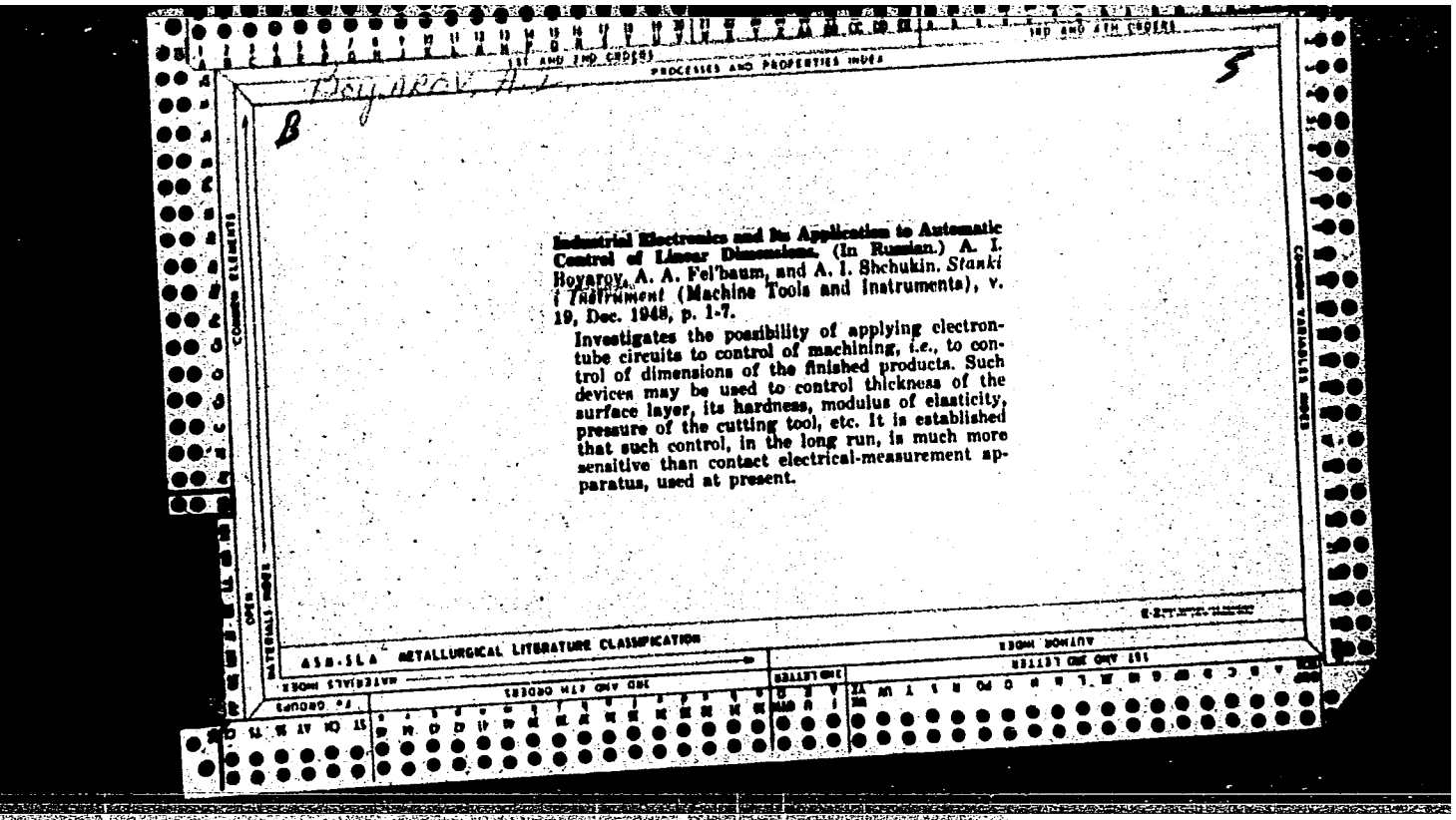
BOYAROV, A.

BOYAROV, A., inzhener; GULISH, S., inzhener; SOLOV'YEV, A., kandidat tekhnicheskikh nauk

Improve operational features of the ZIS-150 truck. Avt.transp. 32 no.7:34 Jl '54. (MLRA 7:9)

(Motor trucks)

BOYAROV, A.I., Cand Agr Sci -- (diss) "Effect of ~~moisture-supplying~~ charged irrigation on the fertility of ~~kashtan~~ chestnut soils and the yield of spring wheat in the Trans-Volga region." Saratov, 1958, 19 pp (Min of Agr USSR. Saratov Agr Inst) 210 copies (KL , 29-58, 134)



Industrial Electronics and Its Application to Automatic Control of Linear Dimensions. (In Russian.) A. I. Boyarov, A. A. Fel'baum, and A. I. Shchukin. *Stanki i Instrument* (Machine Tools and Instruments), v. 19, Dec. 1948, p. 1-7.

Investigates the possibility of applying electron-tube circuits to control of machining, i.e., to control of dimensions of the finished products. Such devices may be used to control thickness of the surface layer, its hardness, modulus of elasticity, pressure of the cutting tool, etc. It is established that such control, in the long run, is much more sensitive than contact electrical-measurement apparatus, used at present.

BOYAROV, A.I.; KLEYMENOV, Yu.V.; NOVITSKIY, Ye.A.; OVCHARENKO, G.I.

The "Kaliber-VEI" induction profilograph and profilometer.
Stan.i instr. 26 no.12:20-24 D '55. (MLRA 9:2)
(Surfaces (Technology))

BOYAROV, A.I.

AUTHOR: Delkin, S.R., Boyarov, A.I., Deminov, I.A. and Ovcharenko, G.I.

121-2-6/20

TITLE: Automatic machine for the sorting of taper rollers (Avtomat dlya sortirovki konicheskikh rolikov)

PERIODICAL: "Stanki i Instrument" (Machine Tools and Tools), 1957, No.2, pp. 21 - 24 (U.S.S.R.)

ABSTRACT: A new improved taper roller sorting machine ACP.-3 which trebles the output of its former product (MCP-2) in a smaller space, has been completed by the Leningrad Instrument Plant (Kalibr). The mechanism is illustrated by a diagrammatic sketch. The rollers are placed in a hopper and individually drop into a channel with a slot at the bottom. If the large end of the roller faces downwards, the roller slides over the slot when pushed along the channel, finally falling through a tube with the large end facing downwards. If, to begin with, the roller drops into the channel with the small end downwards, the roller, when pushed along, protrudes into the slot, until it meets a stop and topples over it to fall through, once again, with the big end downwards. A tube directs the rollers into peripheral slots in a feeding disc rotated stepwise by a ratchet mechanism. The disc carries the rollers to the measuring station where it dwells long enough

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Automatic machine for the sorting of taper rollers (Cont.) I21-2-6/20

for the measuring operation. This consists of pushing the roller by a pin butting against its large end into a fixed ring and pushing a moving ring against the small end of the roller. The depth of roller penetration (measure of diameter) and the distance between the two rings (measure of taper) are separated by a system of levers and transmitted to two multi-contact electric gauges. After the measuring operation, an ejector pin pushes the roller out of the fixed ring and allows it to drop into the sorting box shown in layout. This contains twelve vertical divisions of which the two extremes receive the rejects and each of the inner ten receives one diametral size group. Each diametral size column contains three taper group bins situated above each other. The rollers enter in the centre at the top of the sorting box, and are directed by a central shutter one way or another depending on whether they belong to the first or second half of the size groups. Five shutters each side of the central shutter form inclined planes along which the rollers slide until allowed to fall through into the appropriate vertical division or into the reject bin. The top and centre rows of the vertical divisions each have a row of shutters whose position determines the bin into which the roller falls as the result of its taper dimension. The

2/3

Automatic machine for the sorting of taper rollers. (Cont.) 121-2-6/20

diametral shutters are operated by electro-magnets through levers and the taper shutters through camshafts. Each of the two contact gauges (shown in cross-section) has a number of contact points on a collar fixed to the measuring feeler and fixed contacts, each at the end of an individually adjustable leaf spring. When a contact is made a voltage appears on the grid of an electronic tube, whose anode circuit contains the coil of a relay arranged to actuate a shutter electro-magnet. The number of contacts made during measurement determines the shutter combination which guides the roller into the appropriate compartment. A switching device controls the sequence of operations of the whole machine. The circuit diagram of the machine is reproduced. The machine is designed for rollers between 10 - 20 mm diameter, between 2 and 8° taper and between 15 and 42 mm length. It separates the rollers into ten accepted and two rejected groups by diameter, and further into three accepted and two rejected groups by taper. The dimensional separation of the groups is 4 μ. The machine sorts 3 600 rollers per hour. Its overall dimensions are 1 300 x 845 x 1 650 mm.

3/3 There are 7 figures, including 1 photograph.

AVAILABLE:

Boyarov, A.I.

110-9-15/23

AUTHOR: Alekseyev, L.F., Boyarov, A.I., Engineers and Gertsenberg, G.R., Candidate of Technical Sciences.

TITLE: An Instrument for Simulating Models of Automatic Regulation Systems. (Pribor dlya modelirovaniya sistem avtomaticheskogo regulirovaniya)

PERIODICAL: Vestnik Elektropromyshlennosti, 1957, Vol.28, No.9, pp.53 - 59 (USSR).

ABSTRACT: It is not always advisable to use digital computers to solve problems of automatic regulation because their high accuracy is superfluous. The circuit characteristics of automatic regulation systems can often be altered somewhat without much changing the nature of the transient process and moreover, the characteristics of actual systems cannot always be determined accurately. In investigating automatic regulation systems it is necessary to select a circuit of the best structure to determine the type and place of insertion of stabilising devices and to investigate the effect of alterations during the adjustment of the regulating system. When digital computers are used, new differential equations must be set up for each new condition, which is tedious. Moreover, the results are not presented in a form that easily gives a clear physical picture of the processes occurring in the regulator system. In many

Card 1/4

An Instrument for Simulating on Models of Automatic Regulation Systems.

cases it is much more convenient to use an analogue computer to simulate modelling individual typical links of the given system of regulation. In the majority of cases, automatic regulation systems can be represented as a series of elementary links of the inertia, oscillatory, differentiating or other types. These links can be modelled by means of d.c. amplifiers with suitable output impedances and feed-back systems. The main advantages of the analogue system based on the principle of simulating individual typical links of the automatic regulation system are that it offers rapid and graphic solutions of problems on the selection of circuit structure on stabilising devices and on the influence of changes in the circuit constants. Moreover, the construction of the instrument is relatively simple and special mathematical treatment of the initial data is not required. If necessary, the results can be obtained on different time scales and recorded by oscillograph. The article then describes briefly the main characteristics of an instrument for simulating automatic regulation systems type ПМ-САР developed in the All-Union Electro-technical Institute in 1954-1955. Work of this kind was commenced by Doctor of Technical Sciences A.A. Fel'dbaum in 1956-1957 and in recent years similar work has been published abroad. The instrument, which is illustrated in Fig.1, consists

An Instrument for Simulating on Models of Automatic Regulation Systems.

of 42 units (in addition to an infra-low frequency apparatus installed separately). 32 units can be used at once and are located in the upper part of the instrument. The lower part contains power packs. All the units are interchangeable and can be placed in any position in the panel. The principles of construction of the units are then described with details of the different types of unit and their circuits. They include inertia, amplifier, differentiating, integrating, oscillatory, universal and several other kinds of unit. The control panel is located in the centre of the apparatus and is used to switch and control the supply to any of the four sections into which the main panel is divided. The equipment includes a cathode-ray oscillograph. Correct operation of the instrument when simulating complicated multi-circuit systems using up to 25 units is ensured by the high accuracy of simulation and the absence of leakage linkages. The overall accuracy of the instrument depends on the complexity of the problem and is on an average 10 - 20%. Although the instrument has not been in use long it has successfully and rapidly solved a number of particular engineering problems on the development of complicated regulators.

Card3/4 There are 11 figures, and 5 references, 2 of which are Slavic.

110-9-15/23

An Instrument for Simulating on Models of Automatic Regulation Systems.

ASSOCIATION: VEI

SUBMITTED: February 26, 1957.

AVAILABLE: Library of Congress.

Card 4/4

Vsesoyuznyy elektrotekhnicheskiy institut.

BOYAROV, A. I.

FRAME I BOOK EXPLOITATION SOV/3688

Akademiya nauk SSSR. Institut mashinovedeniya. Kniga po tekhnologii mashinostroyeniya. Seminar po kachestvu poverkhnosti

Kachestvo poverkhnosti detaley mashin, sbornik 4. Tekhnologicheskiye faktory chistoty. Metrologiya i pribory. Ekspluatatsionnyye svoystva poverkhnostnogo sloya (Surface Quality of Machine Parts, Collection of Articles, No. 4. Processing Factors in Machining. Metrology and Instruments. Operational Properties of the Surface Layer) Moscow, Izd-vo AN SSSR, 1959. 291 p. (Series: Its: Trudy) Errata slip inserted. 3,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya.

Resp. Ed.: P.Ye. D'yachenko, Professor; Ed. of Publishing House: G.B. Gershkov; Tech. Ed.: T.P. Polenova.

PURPOSE: This collection of articles is intended for technical personnel concerned with the quality of surface finishes of machine parts.

COVERAGE: This collection of articles deals with problems of surface roughness and the effect of surface roughness on the wear and strength of machine parts. Among the topics discussed are the development of international standards for surface roughness, the effect of cutting fluids and cutting-tool vibration on the surface roughness of machined parts, the effect of lay direction on the wear of plane friction surfaces, methods and instruments for measuring surface roughness, and the processing of profilograms of finished surfaces. No personalities are mentioned. References follow several of the articles.

BOYAROV, A.I.

Frequency characteristics of feeler-type profilometers. Izm. tekh. no.9:5-7 S '60. (MIRA 13:9)
(Electronic instruments)

BOYAROV, A.I.

Unit-type profilograph-profilometer. Trudy Sem.po kach.poverkh. no.5:219-224 '61. (MIRA 15:10)
(Electronic instruments)

ANDREYEV, V.I.; BELKIN, S.R.; BOYAROV, A.I.; DEMINOV, I.A.; OVCHARENKO, G.I.

Automatic machine for precision sorting of small bearing balls. Stan. i instr. 32 no. 1:25-27 Ja '61. (MIRA 14:2)
(Sorting devices)

BOYAROV, A.I.; VYATICH, L.A.; KLEYMENOV, Yu.V.; OVCHARENKO, G.I.

New recording profilometer. Stan.i instr. 32 no.2:16-19 F '61.
(MIRA 14:2)

(Surfaces (Technology)—Measurement)

1. BOYAROV, A.N.

2. USSR (600)

4. Drill (Agricultural Implement)

7. Results of testing the SOZ-25 grain drill for use in irrigation farming, Mekh. i elek. sel'khoz. no. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

BOYAROV, A.T.

Method for determining specific surface using geophysical data.
Geol.nefti i gaza 4 no.7:39-41 Je '60. (MIRA 13:8)

1. Nauchno-issledovatel'skiy institut neftyanoy promyshlennosti, Kuybyshev.
(Rocks--Permeability) (Porosity)

BOYAROV, A.T.

Effect of surface condition of reservoir rocks on the specific resistivity. Geol. nefti i gaza 4 no.10:46-47 O '60. (MIRA 13:9)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.
(Oil sands—Electric properties)

BOYAROV, A.T.

Determining reservoir properties of strata by their specific resistivity. Prikl.geofiz. no.25:216-222 '60. (MIRA 13:6)
(Electric prospecting)

FEL'DMAN, B.Ye.; BOYAROV, A.T.

Use of geophysical materials in determining oil saturation and reservoir characteristics of rocks in the deposits of Kuybyshev Province. Trudy VNII no.29:113-124 '60. (MIRA 13:10)

1. Kuybyshevskiy Nauchno-issledovatel'skiy institut neftyanoy promyshlennosti.
(Kuybyshev Province--Oil well logging, Electric)

BOYAROV, A.T.

Permeability determination by G.S. Morozov's method. Geol. nefti i gaza 5 no.12:52-53 D '61. (MIRA 14:11)

1. Kuybyshevskiy Nauchno-issledovatel'skiy institut po pererabotke nefti.

(Oil sands--Permeability)

BOYAROV, A.T.; Prinimala uchastiye AGARMIRZYAN, T.I.

Using ultrasound to accelerate the extraction of oil from oil saturated rock samples. Neftepromo delo no.12:29-32 '63.
(MIRA 17:4)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti (for Boyarov). 2. Sotrudnitsa laboratorii ul'tra-zvuka Kuybyshevskogo aviatsionnogo instituta (for Agarmirzyan).

FEL'DMAN, B.Ye.; BOYAROV, A.T.

Effect of fracturing and dolomitization of carbonate rocks on their specific resistance. Geol.nefti i gaza 7 no.2:34-38 F '63. (MIRA 16:2)
(Kuybyshev Province—Rocks, Carbonate—Testing)

BOYAROV, P.

Great changes. Mast.ugl.6 no.3:4-5 Mr '57. (MLRA 10:4)
(Donets Basin--Coal mines and mining)

BOYAROV, V.; LIKHACHEVA, N.B., prof. nauchnyy rukovoditel'

Significance of M.V. Lomonosov's works for medicine. Sbor. nauch. rab. stud. Petrozav. gos. un. no.6:5-10 '62. (MIRA 17:11)

1. Kafedra normal'noy anatomii Petrozavodskogo gosudarstvennogo universiteta.

BOYAROV, V. I. and GERTSENBERG, G. R.

"New apparatus for electronic automation," Vestnik Elektroprom., No. 4, 1951.

BARTENEVA, O.D.; BOYAROVA, A.N.

Brightness of the twilight and night sky. Trudy GGO no.100: 133-140 '60. (MIRA 13:6)
(Photometry) (Night sky) (Twilight)

BARTENOVA, O.D., kand.fiz.-matem.nauk; BOYAROVA, A.N., inzh.

Lighting conditions at dusk and at night. Svetotekhnika 10 no.3: 11-17 Mr '64. (MIRA 17:3)

1. Glavnaya geofizicheskaya observatoriya.

POMETUN, Ye.A.; BOYAROVA, V.I.

Quantitative spectral determination of zinc in soils. Zhur. anal. khim. 16 no. 1:103-105 Ja-F '61. (MIRA 14:2)

1. Institute of Chemistry, Academy of Sciences of the Tadjik S.S.R., Stalinabad.
(Zinc—Analysis)

S/169/63/000/001/050/062
D218/D307

AUTHORS: Chalikova, Ye.K. and Boyarova, Ye.D.

TITLE: Seismological exploration of the Kuybyshev region

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1963, 21, abstract 1D110 (Tr. Kuybyshevsk. N.-i. in-t neft prom-sti, 1961, no. 8, 197-336)

TEXT: An analysis was carried out of seismic data, obtained by groups from the "Kuybyshevneftegeofizika" combine, over a number of years, up to an including 1958. Regions with different seismological situations were defined, and areas were delineated on which it is intended to study reflections from different horizons. Regions were also defined where seismic prospecting may be adequately used to study the tectonics of Permian deposits. Seismological conditions are described for each petro-geological region. For each district a determination was made of the properties of geological sections, the quality of the data, and the conditions for seismic exploration. A chart was constructed from which it is clear that

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Seismological exploration ...

40% of the area is seismologically favorable, 40% is unfavorable and 20% partly unfavorable. Over the favorable regions (Kinel'-Cherkasskiy and Yuzhno-Kuybyshevskiy oil and gas field, central left-bank part of the Stavropol' depression, parts of the Sergiyevskiy region), it is possible to use reflected-wave methods to solve problems in detailed exploration. It is recommended that in order to exclude possible reflection-correlation errors, the section network density should be 1.5 - 2 km per km^2. Grouping of instruments is recommended for the improvement of data. High-frequency filtration is desirable in the study of near boundaries. It is pointed out that over the unfavorable regions, it is useful to carry out preliminary surveys in order to obtain some very general information on the tectonics and to select regions for detailed exploration over the unfavorable regions (Chapayevskiy and Samaralukskiy regions, northern part of Sergiyevskiy region, eastern part Stavropol'skaya depression), extensive seismic work is inadvisable in the nearest future. Here it will be necessary to begin preliminary exploration with the aid of intermediate magnetic stations, and also make partial use of КМПВ (KMPV) for the study of the topography of the crystalline

Seismological exploration ...

bed and the detection of secondary structures in the sedimentary layer.
[Abstracter's note: Complete translation]

Card 3/3

CHALIKOVA, Ye.K.; BOYARKINA, Ye.D.

Determining the type of geological section on the basis of seismic prospecting data in the Kama-Kinel' Depression. Razved. i prom. geofiz. no.49:3-11 '63 (MIRA 17:7)

BOYAROVA, Ye.M., inzh.

Some variations in two-scale aerial photographic surveying.
Trudy MIIGAIK no.50:103-105 '62. (MIRA 16:7)

(Aerial photogrammetry)

BOYAROVICH, N. M.

13605* (Bacterial Fertilization.) Bakterial'nye udobreniia. N. M. Boiarovich. *Zemledelie*, v. 2, no. 2, Feb. 1954, p. 112-114.
Includes tables.